## **CLAIMS**

- 1. A method of noise estimation during a finger merge condition, comprising:
- determining noise estimates from a plurality of finger processors;
- comparing the noise estimates to determine if they are at least within a
- 4 certain delta offset of each other; and
  - before combining noise estimates, taking a corrective action to prevent
- 6 noise under-estimation.
- 2. The method of claim 1, wherein taking a corrective action involves blocking
- 2 the noise estimate from being included in a combined noise estimate total.
- 3. The method of claim 2, wherein the combined noise estimate total forms the
- 2 basis of a fast forward power control decision.
- 4. The method of claim 2, further comprising sorting the noise estimates before
- 2 comparing.
  - 5. The method of claim 4, further comprising determining whether the noise
- 2 estimates are sorted.
- 6. The method of claim 4, further comprising determining a dis-sorting distance
- 2 before performing the sorting.
- 7. The method of claim 1, wherein taking a corrective action involves applying a
- 2 correction factor to a combined total noise estimate.
- 8. The method of claim 7, wherein the combined noise estimate total forms the
- 2 basis of a fast forward power control decision.

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- 9. The method of claim 7, further comprising sorting the noise estimates before2 comparing.
- 10. The method of claim 9, further comprising determining whether the noise estimates are sorted.
- 11. The method of claim 9, further comprising determining a dis-sorting distance2 before performing the sorting.
- 12. A noise estimator for improving signal quality estimation during a finger2 merge condition, comprising:

means for determining noise estimates from a plurality of finger processors;

means for comparing the noise estimates to determine if they are at least within a certain delta offset of each other; and

means for taking a corrective action, before combining noise estimates, to prevent noise under-estimation.

- 13. The noise estimator of claim 12, wherein the means for taking a corrective
  2 action involves blocking the noise estimate from being included in a combined noise estimate total.
- 14. The noise estimator of claim 13, wherein the combined noise estimate total2 forms the basis of a fast forward power control decision.
- 15. The noise estimator of claim 13, further comprising means for sorting the2 noise estimates before comparing.
- 16. The noise estimator of claim 15, further comprising before means for determining whether the noise estimates are sorted.

- 17. The noise estimator of claim 15, further comprising means for determining a2 dis-sorting distance before performing the sorting.
- 18. The noise estimator of claim 12, wherein taking a corrective action involvesapplying a correction factor to a combined total noise estimate.
- 19. The noise estimator of claim 18, wherein the combined noise estimate total2 forms the basis of a fast forward power control decision.
- 20. The noise estimator of claim 18, further comprising means for sorting the2 noise estimates before comparing.
- 21. The noise estimator of claim 20, further comprising means for determiningwhether the noise estimates are sorted.
- 22. The noise estimator of claim 20, further comprising means for determining a2 dis-sorting distance before performing the sorting.